Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of Federal-State Joint Board on Universal Service	CC Docket No. 96-45

COMMENTS OF VERIZON[1] ON PROPOSAL TO UPDATE PROXY MODEL INPUTS

The Common Carrier Bureau's proposal to update the line count data in the universal service cost model is worthwhile, provided that the Bureau updates the associated customer location data as well to avoid understating loop costs. Similarly, the Bureau's proposal to update other model inputs should be done in a way that overcomes the model's tendency to understate costs.

I. Line Count Data Should Not Be Updated Without Updating Customer Location Data as Well.

In the *Line Counts Update Order*,[2] the Bureau updated the line counts for the universal service cost model using year-end 1999 data for the year 2001.[3] In its Public Notice, the Bureau

[1] The Verizon telephone companies ("Verizon") are the affiliated local telephone companies of Verizon Communications Corp. These companies are listed in Attachment A.

[2] *Federal-State Joint Board on Universal Service*, 15 FCC Rcd 23960 (2000) ("*Line Counts Update Order*").

[3] The Commission's high-cost universal service support mechanism for non-rural carriers relies on a "hybrid cost proxy model" for purposes of calculating the forward-looking costs of providing services eligible for support. ***See*** *Federal-State Joint Board on Universal Service; Forward-Looking Mechanism for High Cost Support for Non-Rural LECs*, 14 FCC Rcd 20156

requests comment on the need to update these line counts again, using year-end 2000 line counts to calculate costs for year 2002.

Updating line counts on an annual basis is appropriate, as it allows the model to reflect increasing economies of scale as demand grows. However, updating the line counts without updating customer locations as well overstates those economies of scale and understates the cost of providing supported services.

The change in line counts over time occurs mainly due to two reasons. First, customers in existing locations may order additional lines. Second, customers in new locations may order service. While the additional lines in the first case can be provisioned by existing facilities to a large extent, brand new facilities are often needed in the second case. The requirement for new facilities causes the cost of providing service to a new location to be substantially greater than the cost of adding new service to an existing location. Increasing the number of lines in the model without increasing the number of customer locations makes the model more unreliable and tends to understate the costs per line.

If the Bureau decides to update the model to include year-end 2000 line counts, it is imperative that the Bureau also update the underlying customer locations and road data to the same year to avoid understating costs. The current model relies on year-end 1996 customer locations and essentially 1990 Census Bureau road data. Updating the line counts for a second time while leaving the other data stagnant will only worsen the existing mismatch between line counts and location data.

(1999). The model uses cost inputs from various sources, including line counts data reported by the incumbent local exchange carriers to develop the cost of providing supported services and the average per-line support based on those costs.

In the *Line Counts Update Order*, the Bureau decided not to update location data because it found that 65 percent of new lines are ordered to existing locations and that the model increases cable sizes and digital loop carriers to serve the additional lines. ***See*** *Line Counts Update Order*, ¶ 12. For the remaining 35% of new lines that go to new locations, the Bureau rationalized that the model would pick up the costs of these lines to the extent that they were along existing roads. ***See*** *id*., ¶ 13. However, this simply ignores the higher costs of the 35 percent of new lines that go to new locations that are located along new roads, which is likely to be substantial considering that the model relies on road data from the 1990 census. The Bureau also found that there was an immediate need to adjust the line counts to avoid growth in the size of the fund due to the time lag between the model inputs and the submission of new reported lines by carriers seeking support and that this update should not be postponed until updated customer location data were available. ***See*** *id*., ¶ 13. However, with the availability now of Year 2000 Census data, there is no longer any excuse for allowing the customer location data to lag by 5 to 10 years behind the line count data. Year 2000 Census road data and year 2000 location data should be used to better capture the costs of serving year-end 2000 line counts that the Bureau proposes to use for the model.[4] The Bureau should not make the same mistake this year as it did last year by updating line counts without updating customer locations.

[4] In response to a question regarding missing streets in its TIGER/Line products and the TIGER Map Service, the U.S. Census Bureau responded that "we missed some in the original development operation for the 1990 census. And since we have had very little funding since then for feature updating, *we do not yet have most of the new features coming into existence after 1990.* At this point our Regional Offices are doing some updating and we are anticipating a full update by the Census in 2000 (depending on funding)." U.S. Census Bureau, *Frequently Asked Questions About TIGRE/Line and TIGER Products available at* http://www.census.gov/geo/www/tiger/faq.txt (emphasis added).

II. There Is No Need To Re-Run The Model Each Quarter With Updated Line Count Data.

In the Public Notice, the Bureau also seeks comment on whether to adjust support amounts each quarter using wire center line count data reported by the carriers each quarter. Public Notice at 3. If the benchmark cost is also recalculated based on the revised costs using updated line counts, the change in quarterly line counts is unlikely to lead to a significant change in the size of the universal service fund, as the lowering of the cost per-line would be offset to a large extent by the lowering of the benchmark used in the fund calculation. Given the resources required for updating, a quarterly revision to the model to include quarterly line counts does not appear to be necessary. Revisions every six months should be sufficient to reflect the impact of line growth.

III. The Bureau Should Treat Special Access Lines Consistently For Both Model Inputs And Calculations Of Per-Line Support.

The Bureau also seeks comments on whether to divide 2000 ARMIS special access lines among wire centers in the same proportion as special access lines reported by the carriers in the *1999 Data Request*. ***See*** Public Notice at 3. This may be a reasonable approximation of the distribution of year 2000 special access lines, provided that special access lines are correctly counted within the model. Currently, the model uses the actual number of special access lines to account for the additional costs brought about by growth in special access lines, but it then uses "voice grade equivalents" for special access (i.e., a four-wire T-1 facility is counted as 24 voice grade equivalent lines) to calculate the final per-line cost. This inconsistency has led to an understatement of the cost of providing universal service. The Bureau should fix this by using

the same number of equivalent lines for special access in both the numerator (the model costs for universal service) and the denominator (the number of lines).

IV. If The Bureau Updates Other Model Inputs, It Should Fix The Flaws That Cause The Model To Understate Costs.

The Bureau requests comments on whether it should update other model inputs, such as the use of annual ARMIS data to calculate general support facilities investment and the percentage of the switch used for interstate service. ***See*** Public Notice at 3-4. Such updates are appropriate so long as the Bureau corrects flaws in the model that would cause such updates to exacerbate the tendency of the model to understate costs. For instance, the model uses ARMIS investment data to calculate the ratio of general support facilities investment (buildings, motor vehicles, and general purpose computers) to total plant in service (outside plant, switching, and transport). This ratio is applied to the model's calculation of total plant in service to estimate the amount of general support facilities investment. Accordingly, to the extent that the model reduces the total plant in service by using forward-looking data, it underestimates general support facilities investment by making an unwarranted assumption that the two are linked. For instance, if the prices of switches are reduced by 20 percent, it does not mean that the building shrinks by 20 percent, and a reduction in cable costs per-foot does not mean that the distance that a truck must travel to reach a repair on that cable goes down proportionately. The model should include other parameters, such as the route length and the number of lines served, in the algorithm for developing appropriate general support facilities investment.

Conclusion

The Bureau should update the line counts and other model inputs, provided that it also updates other inputs, such as customer locations and roads, and provided that it makes necessary changes to the model algorithms so that updated inputs do not exacerbate the tendency of the model to underestimate costs.

Respectfully submitted,

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